

On page 12, line 27, cancel "means" and substitute therefor --part--.

On page 12, after line 29, insert the following paragraph:

--Although the present invention has been described with reference to specific embodiments, those of skill in the art will recognize that changes may be made thereto without departing from the spirit and scope of the invention as set forth in the hereafter appended claims.--

After page 17, cancel line 1 and substitute the following centered heading therefor::

--ABSTRACT OF THE DISCLOSURE--.

On page 17, line 3, cancel "According to the invention," and substitute therefor --A method and radio communication system for providing a control channel wherein--.

On page 17, line 12, cancel "plurality" and substitute therefor --number--.

On page 17, line 18, cancel "plurality" and substitute therefor --number--.

In the Claims:

On page 13, cancel line 1, and substitute the following left-hand justified heading therefor:

--We Claim As Our Invention:--.

Please cancel claims 1-14, without prejudice, and substitute the following claims therefor:

15. A method for providing a control channel in a radio communication system, the method comprising the steps of:

assigning at least one channel which forms the control channel to a base station in order to transmit control information;

transmitting at least one synchronization sequence by the base station, the at least one channel corresponding to at least one of a selection of the at least one synchronization sequence and an order of a plurality of the synchronization sequences;

receiving, at a subscriber station, the at least one synchronization sequence;
and

determining, via the subscriber station, a configuration of the control
channel based on at least one of the recognized synchronization sequence which
5 designates the at least one channel and the recognized order of the plurality of
synchronization sequences.

16. A method for providing a control channel in a radio
communication system as claimed in claim 15, wherein the configuration of the
10 control channel relates to a variable number of the at least one channel, the at least
one channel being designated by at least one of time slots, spread codes, and a
combination of a scrambling code and a code designating the channel.

17. A method for providing a control channel in a radio
15 communication system as claimed in claim 15, wherein the configuration of the
control channel relates to a variable number of the at least one channel, the at least
one channel being designated by a combination of a scrambling code and a code
designating the channel.

18. A method for providing a control channel in a radio
20 communication system as claimed in claim 15, wherein coding of the configuration
of the control channel via at least one of the selection and the order of the
synchronization sequences extends over a plurality of time slots.

19. A method for providing a control channel in a radio
25 communication system as claimed in claim 15, wherein the synchronization
sequences are transmitted in time slots in which the at least one channel is also
arranged.

20. A method for providing a control channel in a radio communication system as claimed in claim 15, wherein the synchronization sequences are transmitted with less power than the control information.

5 21. A method for providing a control channel in a radio communication system as claimed in claim 15, wherein the synchronization sequences are unmodulated orthogonal gold codes.

10 22. A method for providing a control channel in a radio communication system as claimed in claim 15, wherein the synchronization sequences and control information are transmitted in time slots which are part of a TDD transmission system with broadband channels, with at least one time slot per frame being used for the synchronization.

15 23. A method for providing a control channel in a radio communication system as claimed in claim 15, wherein a plurality of base stations are synchronously assigned a time slot for transmitting the at least one synchronization sequence, adjacent base stations use a different time offset with respect to a start of the time slot for transmitting the synchronization sequence, and
20 the time offset corresponds to at least one of a selection of the at least one synchronization sequence and the order of the plurality of synchronization sequences.

24. A method for providing a control channel in a radio communication system as claimed in claim 15, wherein two synchronization
25 sequences are transmitted in one time slot.

25. A method for providing a control channel in a radio communication system as claimed in claim 24, wherein a time interval is predefined between the two synchronization sequences in the one time slot.

26. A method for providing a control channel in a radio communication system as claimed in claim 15, wherein further information is transmitted via the base station according to at least one of the selection and order of the synchronization sequences.

27. A method for providing a control channel in a radio communication system as claimed in claim 26, wherein the further information relates to at least one of spread codes, a scrambling code, a frame synchronization, and midambles used by the base station.

28. A radio communication system providing a control channel, comprising:

at least one base station for transmitting control information and at least one synchronization sequence;

a control device for assigning at least one channel which forms the control channel to the base station in order to transmit the control information, wherein the at least one channel corresponds to at least one of a selection of the at least one synchronization sequence and an order of a plurality of the synchronization sequences;

a subscriber station for receiving and evaluating the at least one synchronization sequence; and

an evaluation part assigned to the subscriber station which determines a configuration of the control channel based on at least one of the recognized synchronization sequence which designates the at least one channel and the recognized order of the plurality of the synchronization sequences.